

# Glassy-winged Sharpshooter Nursery Shipping Protocol

Revised July 26, 2007

These protocols are provided to clarify the responsibilities and procedures to be followed by County Agricultural Commissioners in order to certify glassy-winged sharpshooter-free nursery stock destined to non-infested areas of California. These procedures are derived from the Pierce's Disease Control Program Regulations (formerly known as the Emergency Regulations and the Master Permit QC 922), including the associated Compliance Agreements and their exhibits.

## 1. Nursery Evaluation by CAC

County Agricultural Commissioners (CAC) monitor the visual survey and trapping activities of nurseries for the presence of glassy-winged sharpshooters (GWSS) to determine if a nursery in the infested area is eligible to ship nursery stock to non-infested areas of California under:

- A. The Pierce's Disease Control Program Regulations (non-infested premise nursery) or,
- B. The Master Permit/QC 922 (infested premise nursery) or,
- C. A combination of the Pierce's Disease Control Program Regulations and the Master Permit.
- D. Qualifying nurseries shall sign a compliance agreement under the regulations or master permit or both (i.e., multiple yards or locations).
- E. Or, based on monitoring, CAC determines that a nursery is unable to qualify to ship nursery stock under A, B, or C to non-infested areas because of continuous pest pressure.

## 2. Shipping Under Pierce's Disease Control Program Regulations (non-infested premise nursery)

For those nurseries qualified to ship nursery stock using the Pierce's Disease Control Program Regulations, which are the most stringent standards, the shipments shall be accompanied by a stamp or certificate, which affirms that the shipment meets one of the following two conditions (A or B):

- A. Apply an Approved Treatment (approval pending field trials) to all plants submitted for certification prior to shipping.
- B. Ship plants originating from a non-infested (GWSS-free) premise or a non-infested (GWSS-free) portion of a premise. The non-infested (GWSS-free) premise shall be determined by:
  - (1) Visual survey
  - (2) Trapping

**(CAC are expected to monitor all of the above nursery activities.)**

***Definition:*** A non-infested (GWSS-free) premise or portion of a premise is defined as a non-infested nursery or portion of a non-infested nursery. A GWSS-free premise must be free of GWSS (viable) egg masses, live nymphs, and with no more than three adults found in the same ½ acre in a two-week period.

For those destination counties enforcing restrictions the nursery must provide a Shipping Permit (Blue Tag) for each shipment destined to non-infested areas.

## 3. Shipping Under the Master Permit/QC 922 (infested premise nursery)

For those nurseries qualified to ship under the Master Permit, all of the following conditions must be met:

- A. A GWSS-free staging area (shipment loading area) is trapped to ensure the area is GWSS-free. Either the nursery or the CAC may place and service GWSS yellow sticky panel traps within the staging area; however, it is the responsibility of the CAC to monitor this activity to ensure a GWSS-free staging area.
- B. The nursery shall submit GWSS-free plants for inspection.
- C. The CAC conducts a 100% inspection of all host plants at the GWSS-free staging area or nursery personnel conduct 100% inspection of host material under the direction of and in the presence of the CAC at the GWSS-free staging area.
- D. If the CAC finds an apparently viable GWSS life stage on a particular species of plant the infested plant(s) shall be returned to the growing grounds. The CAC shall submit a sample of the GWSS for confirmation to the CAC Entomologist or the Plant Pest Diagnostics Center (PPDC). If GWSS is confirmed, action shall be taken by the nursery to mitigate the pest risk. The CAC shall make every effort to identify the growing locations of the different species of plants, which should be rejected on the basis of a find. This allows the CAC at origin the flexibility to make decisions based on pest risk assessment regarding the nursery stock and its location within the nursery grounds.
- E. Once the plants are inspected by the CAC and found free of GWSS life stages, the nursery shall apply a treatment to safeguard plants from infestation prior to shipment. The treatment shall be effective against adult and nymphal stages of GWSS. (Refer to Pesticides for Use).
- F. The CAC issues a Certificate of Quarantine Compliance (CQC) or other approved certificate for each shipment destined to a non-infested area. The treatment shall be witnessed by CAC as necessary. The nursery shall indicate the time, date, and material used on the CQC. (CAC witnessing of treatment may be reduced to monitoring level after nursery develops adequate treatment protocols and procedures.)
- G. The nursery inspects the shipping vehicle for the presence of GWSS prior to the loading of plants. The vehicle's doors shall remain closed or some other method used approved by the CAC, except when plants are being loaded, to prevent the entry of GWSS adults after inspection.
- H. The nursery provides a Shipping Permit (Blue Tag) for each shipment destined to non-infested areas.

#### **4. Destination Inspection**

*Note: Inspection of arriving nursery stock shipments at destination is at the discretion of and conducted by the destination CAC.*

- A. When a nursery stock shipment arrives at a nursery, verification of the paperwork is essential.
  - (1) Check to see if a CQC or other approved certificate is present and, if necessary, a blue tag.
  - (2) If neither is present and the shipment is from a partially infested county, check to see if the shipping nursery is located outside of the infested area. If it is, then neither a CQC nor blue tag is required. If it is from an infested area, the county at destination should call the PD/GWSS Nursery Program representative to inquire about the shipment paperwork, otherwise reject the shipment (return to origin); it does not meet requirements.
- B. If live GWSS adults are found in the truck, the truck should be closed and the entire shipment should be rejected and returned to origin.
  - (1) If the shipment was a multiple county drop, notify the other CAC's.
  - (2) If live adults fly into the nursery from the shipment, then see below.
- C. If live nymphs are found while inspecting an off-loaded nursery stock shipment, the following should be done:
  - (1) Collect as many of the nymphs or adults as possible from the shipment and submit the sample to CDFA's PPDC for confirmation.

- (2) Isolate the shipment and immediately apply a chemical treatment (see #6) to all the plant material in the shipment. The treatment must be effective against adult and nymphal stages of GWSS.
- (3) Reject and return the entire shipment to origin.
- D. If during the inspection of an incoming nursery stock shipment an apparently viable egg mass of GWSS is found, the following should be done:
  - (1) Finish inspecting the entire shipment.
  - (2) Secure suspect GWSS sample(s) from the shipment and submit to the CDFA's PPDC for confirmation.
  - (3) Put the particular species on hold (off-sale to the public) and safeguard until the sample is confirmed.
  - (4) If the PPDC determines the sample is a non-viable egg mass, then release the particular species of plant.

*Note: Only shipments with PPDC confirmed viable GWSS life stages should be rejected (treated/reconditioned, returned, or destroyed.) It has been determined that fresh parasitized egg masses will be determined to be "viable" due to the fact that not all eggs may be parasitized.*

- (5) If the sample is a viable egg mass, then the following options are available:
  - a) The affected host material is rejected.
    - i) Host material is returned to origin.
    - ii) Host material is destroyed at destination.
    - iii) GWSS host material is held and treated (if CAC feels the pest risk can be mitigated).
      - a) Chemically treat until GWSS pest risk is eliminated which is determined by the CAC.
      - b) Removal of all leaves (defoliate) to remove egg masses with disposal in a manner that renders all life stages non-viable.
- E. If one or more adult GWSS or nymph are found in a nursery and the find can be directly linked to a recent shipment, then:
  - (1) Notify GWSS program
  - (2) Notify origin CAC

## **5. Follow-Up by Origin CAC when a confirmed life stage of GWSS is found at destination.**

- A. If the nursery is operating under the non-infested (GWSS-free) premise of the Pierce's Disease Control Program regulations, the nursery will immediately discontinue shipments that include the affected species of plant(s) and will treat those species of plants to eliminate GWSS from within the nursery.
- B. The nursery or portion of may no longer be "non-infested" (GWSS-free) and the CAC shall review and assess this status in accordance with Pierce's Disease Control Program regulations.
  - (1) Remove host species from shipping list if species can be directly linked to find
  - (2) Check nursery trap and treatment records.
  - (3) Mitigate pest problem(s):
    - Survey origin nursery and growing grounds, if separate
    - Chemical treatment(s)
    - Re-survey after treatment(s)
- C. The CAC shall review and assess non-infested (GWSS-free) staging area in accordance with the Master Permit (infested premise) requirements.
- D. The CAC shall record a strike for that species of plant whether the nursery is operating under the Master Permit (infested premise) or Program Regulations (non-infested premise). (For finds at destination only.)
- E. When three confirmed life stages are found on a specific species of plant at destination within a three-month period, the nursery at origin must immediately suspend shipments for that species of plant and two chemical treatments will be made with a recommended

material over a two-week period. The pest problem shall be mitigated to the satisfaction of the origin CAC before shipments are allowed to resume. All information regarding suspensions of shipping privileges or specific plant species may be put on the GWSS web site bulletin board by the origin CAC. Destination CAC may also use this site to report any finds made during destination inspection. Information regarding the lifting of suspensions may also be indicated on the bulletin board at the time they occur.

**6. Pesticides For Use Against Glassy-winged Sharpshooter**

- A. The California Department of Food and Agriculture (CDFA) is in the process of evaluating a number of pesticides for use against the glassy-winged sharpshooter. When these tests are completed, regulatory officials will use the results as a basis for any materials approved as quarantine treatments for use against GWSS. Materials are also being screened for use on organic crops. Until then, *Fenpropathrin* and *Carbaryl* (as a foliar application) are recommended for use on nursery stock moving out of the infested area based on laboratory efficacy studies. CDFA suggests the following general categories of chemicals for use by nurseries to control/suppress GWSS:

Acephate	<i>Carbaryl</i>	Deltamethrin	Permethrin
Acetamiprid	Chlorpyrifos	<i>Fenpropathrin</i>	
Bifenthrin	Cyfluthrin	Imidacloprid	

- B. The criteria for pesticide selection by an individual grower or nursery will be dependent on their specific circumstances of harvest, worker re-entry, and/or shipment. Pesticides should be used according to EPA registration and label directions.